

# Notice of Allowability

Application No.

09/712,497

Examiner

Carlos Ortiz-Rodriguez

Applicant(s)

GEZGIN ET AL.

Art Unit

2125

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/20/04.
2. ☒ The allowed claim(s) is/are 1-24.
3. ☒ The drawings filed on 28 December 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) •  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>11/14/00</u> • | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                                 | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

### **REASONS FOR ALLOWANCE**

1. Claims 1-24 are allowed.
2. The following is a statement of reasons for allowance:

Applicant's claimed invention is deemed allowable over the prior art of record as the prior art fails to teach a method/apparatus for predicting at least one transient response characteristic of a closed loop apparatus; said closed loop apparatus having an open loop impedance, a design load impedance, an output voltage and at least one inherent internal gain; the method comprising the steps of: identifying an impedance scaling factor associated with said closed loop apparatus; said impedance scaling factor being expressed in terms including said open loop impedance, said at least one inherent internal gain, a gain variable and a phase variable; vectorally establishing a first and second scaling value for said impedance scaling factor as a function of frequency while maintaining a first and second variable of said gain variable and said phase variable at a first and second working value to record said first and second scaling value for a plurality of frequencies; and creating a reference tool relating said first scaling value with said second variable of said gain variable and said phase variable as a function of frequency.

***Citation of Pertinent Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to method and apparatus for predicting transient response of a closed loop apparatus:

- a. U.S. Pat. No. 5,296,794 to Lang et al., which discloses state observer for the permanent-magnet synchronous motor.
- b. U.S. Pat. No. 5,567,227 to Henderson, which discloses method for improving the range of stable control.
- c. U.S. Pat. No. 5,818,245 to Allfather, which discloses impedance measuring.
- d. U.S. Pat. No. 6,054,867 to Wakamatsu, which discloses method for stabilizing feedback loop of impedance measuring apparatus.
- e. U.S. Pat. No. 6,281,650 to Yutkowitz, which discloses method and apparatus for tuning control system parameters.
- f. U.S. Pat. No. 6,519,538 to Bowman et al., which discloses method for predicting stability characteristics of power supplies.
- g. U.S. Pat. No. 6,760,633 to Young, which discloses method and apparatus for predicting stability of a closed loop apparatus.

***Conclusion***

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Ortiz-Rodriguez whose telephone number is (703) 305-8009. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (703) 308-0538. The central official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

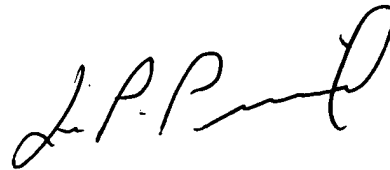
Carlos Ortiz-Rodriguez

Patent Examiner

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September 28, 2004

A handwritten signature in black ink, appearing to read 'L. Picard', with a large, stylized loop at the end.

**LEO PICARD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100**